Boekbespreking

S. VAN DER SPOEL, 1967. Euthecosomata, a group with remarkable developmental stages (Gastropoda, Pteropoda). Gorinchem, J. Noorduyn en Zoon N.V. 375 pp., 366 figs. Hfl. 72.—.

A modern revision of the Pteropoda after the monograph by J. J. TESCH in 'Das Tierreich' (1913) is a most welcome extension of our knowledge of these molluscs in half a century.

In his doctor thesis VAN DER SPOEL deals with only one group of pteropods, the Euthecosomata, including the genera *Limacina, Creseis, Styliola, Hyalocylis, Clio, Cuvierina, Diacria* and *Cavolinia.* The other genera of the Thecosomata and the Gymnosomata will be treated in two further publications.

In the present book the species are described with full synonymy, morphology, reproduction, distribution and some reflections on their phylogeny and speciation. Ninety pages with 330 figures illustrating the shells, and the animals in various stages of development, including histological details, are a demonstration of the author's skill as a draughtsman. The remaining figures represent distribution maps.

A special chapter is devoted to some curious developmental stages in the family Cavoliniidae. In addition to the normal procedure characterized by a regular and parallel development of soft parts and shell, there occur three other types of development, viz., (1) the

skinny form, (2) the minute form, and (3) the aberrant form.

In the skinny form, after an initial, normal stage, the soft parts stop their development while the shell is built up to adult size, so that an emaciate body is housed in a too spacious shell. When the shell has reached its adult shape the soft parts can again start to grow and attain full-grown dimensions.

In the minute form too the development of shell and body are unequal, but here the undersized body does never catch up with the shell. It lies as a reduced mass in the shell top.

The aberrant stage occurs at a certain moment in normally developed animals. In this stage it seems as if all differentiation of the body is lost. It may represent a resting stage.

From what has been said of the disconnected development of shell and body in the skinny and minute forms in the Cavoliniidae it is evident that the construction of the shell must be different from that of other molluscs because the mantle edge of a reduced animal is not able to secrete new shell material quite out of its reach. As an explanation VAN DER SPOEL takes it that in the Cavoliniidae new shell substance is not secreted at the shell edge, but is intercalated between the texture of the lower regions.

A chapter on distribution shows the intricate system of dispersal by ocean currents, depending on temperature, salinity and depth, and on the ecological requirements of each species.

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